

**DETAILED OFFICE ACTION**

1. This action is responsive to the communication received April 5<sup>th</sup>, 2011. Claim 4 has been amended. Claims 1-3 and 5-6 have been previously canceled. Claim 7 has been newly added. Claims 4 and 7 have been entered and are presented for examination.
2. Application 10/558,895 claims priority to German Application 103 24 603.7 (05/30/2003) and is a 371 of PCT/EP04/50948 (05/24/2004).
3. Applicant's arguments, filed April 5<sup>th</sup>, 2011, have been carefully considered, but deemed non-persuasive. The rejection of claim 4 is respectfully maintained.

***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 5<sup>th</sup>, 2011 has been entered.

***Foreign Priority***

5. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Golden et al. (US 6,563,793) in view of Hackney (US 7,359,984).

Regarding claim 4, Golden et al. discloses a method for relaying packets to an external control component assigned to a network node in a communication network **(column 5, lines 42-45 [the enhanced switches detect packets the include requests for reserved connection according to RSVP])**, the communication network having a plurality of network nodes and switching packets **(see Figure 11)**, the method comprising: storing routing information in a plurality of routing tables for the plurality of network nodes, wherein the routing information is internally available to the plurality of network nodes, but unavailable to the external control component **(column 8, lines 46-53 and see Figure 6 [switches 56 include an enhanced switch engine 70 that makes forwarding decisions based on a conventional switch table 69 as well as a novel reserved connection pairs list 67; in figure 6, it is shown that the switch table is located only in the switch and is separate from the ECP 50])**, receiving an in-band signaling packet at an external interface of a plurality of external interfaces of the network node **(see Figure 7 [the figure shows that each switch has multiple interfaces that are used to receive in-band control requests ])**; connecting the external interface to the external control component **(see Figure 7 [the enhanced switches are connected to the ECP 50 via a channel])**; identifying the packet as an RSVP (Resource Reservation Protocol) type of packet **(column 5, lines 42-45 [the enhanced switches detect packets the include requests for reserved connection according to RSVP])**; defining in each interface of the network node a first rule for determined if the IP signaling packet is intended for the external control component **(column 5, lines 41-47 [the switches have been upgraded or replaced to include**

**enhanced functionality. The enhanced switches detect packets that include requests for reserved connections according to existing reservation protocols such as RSVP. Such detected packets are forwarded to the enterprise control point for processing via a reserved signaling channel; therefore there is a policy in place to identify packets with request for reserved communications and a policy that in place to forward such packets to the ECP 50)).** Golden et al. is silent in the event the in-band IP signaling packet is determined as intended for the external control component; each interface of the network nodes having a second rule for identifying which of the plurality of external interfaces has received the in-band IP signaling packet, defining the second rule as modifying a DSCP (Differentiated Services Code Point) field in the header of the packet as a function of the receiving external interface, wherein the DSCP field contains the value uniquely assigned to the receiving external interface; based on the value uniquely assigned to the receiving external interface, identifying which external interface of the plurality of external interfaces received the in-band IP signaling packet and routing the modified packet to the external control component connected to the external interface and thus relaying Internet Protocol (IP) packets to the external control component assigned to the network node. Hackney discloses such features **(column 2, lines 61-64 and column 3, lines 45-55, and column 4, lines 52-67 [Hackney discloses that the packet can be an IP packet; the DCHP field of the packet is modified to be used for a non-intended use such as identifying a destination address that the packet will be forwarded to; based**

**on where the packet is to be routed; the DSCP field is modified to indicate the destination of the message])).**

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Hackney into the system of Golden et al. The method of Hackney can be implemented by enabling the enhanced switches to modify the DSCP field of the IP packet to include the destination of the message. The motivation for this is to indicate to provide the next hop information in the packet.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Golden et al. (US 6,563,793) in view of Hackney (US 7,359,984) as applied to claim 4 above, and further in view of Suzuki et al. (US 2001/0048662).

Regarding claim 7, the references as applied above disclose all the recited subject matter in claim 4, but do not explicitly disclose configuring at least one of a VPI and a VCI in the IP packets to the external control component with rules to operate the external control component. Suzuki et al. discloses that it is possible to use the VCI and/or VPI as a means to determine where to drop the packet or not within an IP network or MPLS network (**paragraph 0173**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the method of Suzuki et al. into the system of the references as applied above. The method of Suzuki et al. can be used to

determine, by the ECP, whether or not to drop the packet wherein one of ordinary skill in the art would recognize the motivation to be for security purposes.

### ***Response to Arguments***

11. Applicant's argues that the Golden et al. and the Hackney et al. references fail to disclose, separately or in combination, "defining in each interface of the network nodes a first rule for determining if the in-band IP signaling packet is intended for the external control component; in the event the in-band IP signaling packet is determined as intended for the external control component, each interface of the network nodes having a second rule for identifying which of the plurality of external interfaces received the in-band IP signaling packet, ..." The Examiner respectfully disagrees.

Golden et al. discloses that the switches have been upgraded or replaced to include enhanced functionality wherein the enhanced switches detect packets that include requests for reserved connections according to existing reservation protocols such as RSVP (**column 5, lines 41-47**). Such detected packets are forwarded to the enterprise control point for processing via a reserved signaling channel (**column 5, lines 41-47**). One of ordinary skill in the art would recognize that there is a policy in place to identify packets with request for reserved communications and a policy in place to forward such packets to the ECP 50.

Hackney et al. discloses that the DCHP field of the packet is modified to be used for a non-intended use such as identifying a destination address that the packet will be

forwarded (**column 2, lines 61-64 and column 3, lines 45-55, and column 4, lines 52-67**).

One of ordinary skill in the art would recognize through the teachings of Golden et al. and Hackney et al. that the DSCP field is no longer needed when the enhanced switch determines that the packet is an RSVP packet and therefore, can be used for a non-intended purpose such as identifying a destination of the packet.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER WYLLIE whose telephone number is (571)270-3937. The examiner can normally be reached on Monday through Friday 8:30am to 6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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